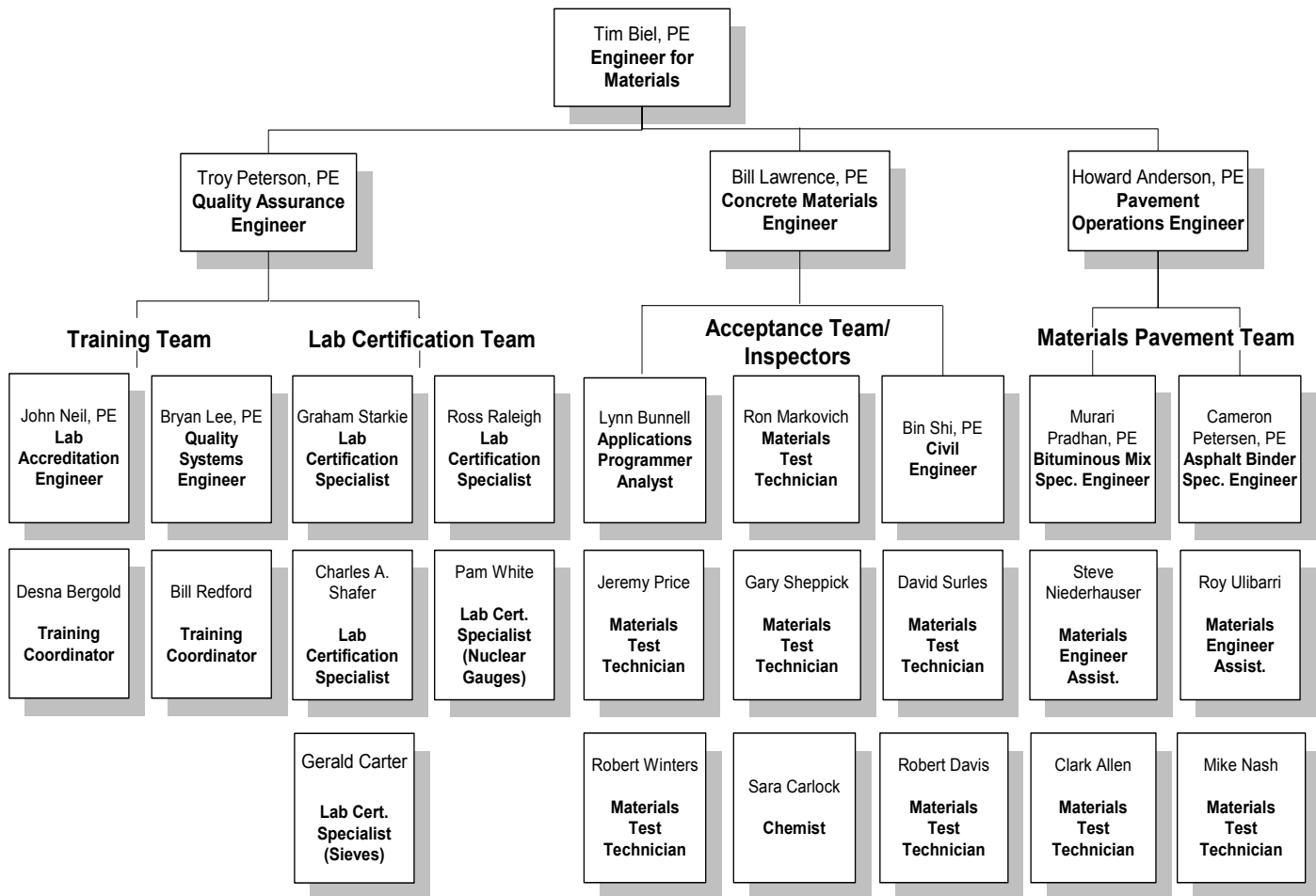
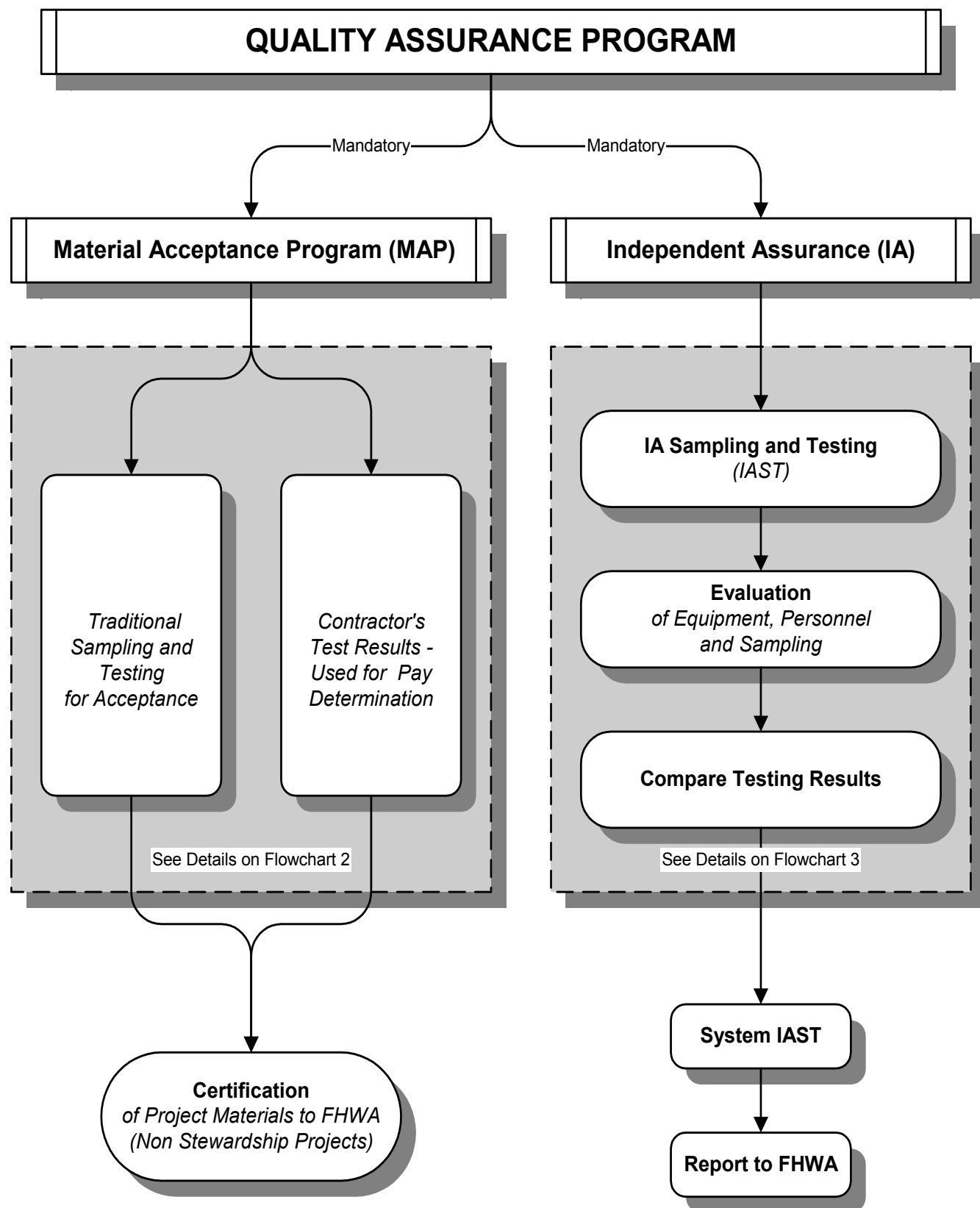


Materials Division





Flow Chart 1

Section 1010

Introduction

1010.01 Scope

The Utah Department of Transportation (UDOT) Construction & Materials Division, Quality Assurance Section has developed this Quality Assurance chapter to establish and document its Quality Assurance Program. This chapter details the program and defines policies, elements, activities, and guidelines to assure that the materials and workmanship in all highway construction projects conform reasonably with the requirements for the approved plans and specifications. It has been developed in conformance with the criteria contained in Federal Regulation *23 CFR 637B-Quality Assurance Procedures for Construction*, consisting of a Materials Acceptance Program and an Independent Assurance Program.

1010.02 Mission

Mission Statement:

Our goal is to develop and administer quality assurance programs to ensure our customers of quality laboratory testing and construction practices.

UDOT's Quality Assurance Program represents the Department's recognition of its responsibility and commitment to ensure a high level of confidence in test results reported by laboratories performing testing activities on UDOT projects. Both State Highway Agency(SHA) and non-SHA personnel are expected to be familiar with all aspects of the Quality Assurance Program (QAP), UDOT Technician Training & Qualification Program (UDOT TTQP) and UDOT Laboratory Qualification Program (LQP) relating to their duties and to perform their duties accordingly.

1010.3 Background

The traditional regulations on sampling and testing of materials and construction inspection were written using the concept of the SHA performing all the sampling and testing for materials acceptance. It does not recognize the use of contractor or non-SHA test results as part of the acceptance decision. However, Federal Regulation *23 CFR 637B* allows the option of using contractor or non-SHA test results in the acceptance decision provided certain other criteria are satisfied.

1010.4 Overview: Quality Assurance Program

Regulation *23 CFR 637B* allows the traditional approach of SHA performed sampling and testing for acceptance and the option of using contractor or non-SHA performed sampling and testing results for acceptance, provided adequate checks are in place(See Flow Chart 1). In conformance with these regulations the UDOT Quality Assurance Program was created, implementing a schedule of activities to cover equipment operations and testing personnel competency. The program provides for three levels of assurance:

1st level: Qualifying laboratories and testing personnel. This assures that personnel are capable of performing the tests properly and that the equipment is functioning properly.

2nd level: Independent Assurance Program. This level assures that the testing personnel continue to perform the tests properly and that the equipment is functioning properly.

The 1st and 2nd levels of the quality assurance program assures the quality of the product through acceptance sampling and testing performed by UDOT.

3rd level: Materials Acceptance Program

- Option 1: Traditional UDOT acceptance sampling and testing. Sampling and Testing by UDOT personnel is conducted according to random sampling, the Minimum Sampling and Testing Guide, and project specifications. Results are validated by independent assurance sampling and testing, proficiency samples, and limited observations.
- Option 2: Sampling and testing performed by the contractor is used in the calculation of pay determination. Acceptance function performed by Department through testing and statistical verification.

The UDOT Quality Assurance Program allows for the use of validated contractor-performed quality control (QC) and non-UDOT laboratories test results for acceptance as part of the acceptance decision provided they both meet the following:

- C The sampling and testing has been performed by UDOT TTQP qualified sampling and testing personnel through UDOT qualified laboratories.
- C The quality of the material has been validated by verification sampling and testing results using statistical means.
- C The appropriate Independent Assurance activities have been conducted in a satisfactory manner.